HERITAGE AND STABILISATION FUND (HSF)

QUARTERLY INVESTMENT REPORT

APRIL TO JUNE 2023

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¹ This section includes economic data available as at August 30, 2023.

EXECUTIVE SUMMARY

- Progress made in moderating inflation resulted in the easing of aggressive monetary actions in most developed economies during the quarter. As a result, the near-term trajectories in monetary policy and inflation rates renewed hope that central banks could achieve their inflation targets without precipitating a deep recession. However, expectations that monetary policy rates will have to remain high for the foreseeable future to keep inflation firmly anchored and a weaker than anticipated recovery in China will weigh on global economic activity. Higher energy costs and trade restrictions due ongoing geopolitical tensions will add to the price pressures and further curtail global economic activity in the remaining months of the year.
- In the United States (US), growth in real gross domestic product (GDP) remained resilient at an annual rate 2.1 per cent in the second quarter of 2023 following a 2.0 per cent increase in first quarter. Increases in consumer spending, government and business investment provided the support for growth. In August, the US Consumer Price Index (CPI) accelerated to 3.7 per cent from the 3.2 per cent in July. US core inflation however, excluding food and energy, fell for the fifth month to 4.3 per cent. In the United Kingdom (UK), real GDP remained largely subdued at 0.2 per cent in second quarter. Lower energy prices slowed the UK inflation rate to 6.8 per cent in July, down from 7.9 per cent in June. Similarly, the Eurozone's economic output was also subdued in the second quarter, growing by only 0.1 per cent. Meanwhile, lower energy costs pushed the Eurozone's CPI down to 5.3 per cent in July, lower than 5.5 per cent recorded in June. In contrast, Japan's economy registered the third straight quarter of expansion, recording a growth of 3.1 per cent in the second quarter. Japan's inflation edged down to 3.3 per cent in the quarter due to lower food and energy costs.
- Most major developed central banks maintained a tightening policy stance amid slowing but still above target inflation. The US Federal Reserve (Fed) raised its key policy rate in May 2023 by 25 basis points and held rates at a range of 5.00 per cent to 5.25 per cent in June. The decision to pause was accompanied by official projections which suggested two additional rate increases would be appropriate by the end of 2023. The European Central Bank (ECB) lifted interest rates by 25 basis points twice over the quarter bringing its marginal lending rate to 4.25 per cent. Meanwhile, the Bank of England

(BoE) raised its bank rate by 25 basis points in May and returned to a larger 50 basis points hike in June. This brought its bank rate to 5.00 per cent and marked its 13th consecutive increase. The Bank of Japan (BoJ) held its accommodative position and kept its short-term interest rate at -0.10 per cent and its 10-year bond yield target at 0.0 per cent.

- Market volatility declined over the quarter and risk sentiment improved as uncertainties arising from turmoil in the banking sector and debt ceiling negotiations in Washington abated. Global equity markets advanced alongside better-than-expected corporate earnings and optimism that the Fed was approaching the end of its rate hiking cycle. Enthusiasm over artificial intelligence (AI) related profit growth helped to extend the move higher. The US S&P 500 index gained 8.74 per cent while other developed stock markets, as represented by the MSCI EAFE index, earned 3.14 per cent. US Treasury yields rose over the quarter with most of the increase concentrated in shorter-dated treasuries. The 2-year US Treasury yield added 87 basis points to close at 4.90 per cent while the 10-year US Treasury yield moved higher by 37 basis points to 3.84 per cent. Overall, the US investment grade fixed income market, as measured by the Bloomberg Barclays US Aggregate Bond index, lost 0.84 per cent.
- The Heritage and Stabilisation Fund (HSF) returned 2.75 per cent in the third quarter of FY 2023, with positive contributions from the equity mandates and the USD fixed deposit portfolio (see Table 1). The equity mandates and the USD fixed deposit portfolio added 2.93 per cent and 0.09 per cent, respectively. Meanwhile, the fixed income mandates detracted 0.26 per cent (see Table 2).
- In comparison to the strategic asset allocation (SAA) benchmark, which rose by 1.53 per cent, the Fund outperformed by 1.22 per cent (see Table 2 and Appendix 1). Excess returns arose from the Fund's overweight to equities and underweight to fixed income. This was augmented by external managers' strategies with significant positive contributions from the US Core Domestic Fixed Income mandate and Non-US Core International Equity mandate.

• As at the end of June 2023, the total net asset value of the HSF was **US\$5,525.0 million**; approximately US\$144.9 million higher than the previous quarter's closing value of US\$5,380.1 million.

Table 1 Absolute Quarterly Returns For the period Apr – Jun 2023 /per cent/

	Absolute Return HSF	Absolute Return Benchmark
Composite Portfolio	2.75	1.53
US Short Duration Fixed Income	-0.61	-0.86
US Core Domestic Fixed Income	-0.43	-0.84
US Core Domestic Equity	8.84	8.86
Non-US Core International Equity	5.02	3.09
USD Fixed Deposit	1.31	N/A

Table 2						
Contributions to Quarterly Returns						
For the period Apr – Jun 2023						
/per cent/						

	3 Months Portfolio Weighted Return to 30-Jun-2023				
	HSF Benchma				
Composite Portfolio	2.75	1.53			
US Short Duration Fixed Income	-0.13	-0.21			
US Core Domestic Fixed Income	-0.13	-0.34			
US Core Domestic Equity	1.96	1.53			
Non-US Core International Equity	0.97	0.57			
USD Fixed Deposit	0.09	N/A			

NB: Differences in totals are due to rounding.

SECTION 1 – INTERNATIONAL ECONOMIC ENVIRONMENT

Headwinds from elevated pricing pressures, restrictive financial conditions, and a weaker than anticipated recovery in China continued to constrain global economic activity. The manufacturing sector deteriorated further while service-oriented businesses benefitted from the ongoing post-pandemic shift towards services. Encouraging progress on the inflation front in most developed economies reduced the likelihood of a deep recession this year and renewed hope that central banks could achieve their inflation targets without precipitating a sharp downturn. Nonetheless, with inflation levels still above target, most major developed central banks maintained a tightening policy bias. The International Monetary Fund (IMF), in its World Economic Outlook (July 2023), upgraded its global growth projection for advanced economies in 2023 to 1.5 per cent from an earlier forecast of 1.3 per cent however, this still reflects a significant slowdown from 2.7 per cent in 2022. The report indicated that while risks remain titled to the downside, the near-term outlook had improved amid easing inflation pressures, the resolution of the US debt ceiling debate and the swift containment of the recent banking sector turmoil.

The US economy expanded at an annualised pace of 2.1 per cent in the three months to June 2023, up from 2.0 per cent during the previous quarter. Robust consumer spending accompanied by a surge in government and private investment stemming from infrastructure and green energy projects underpinned economic activity for the period. Demand for services remained resilient with the S&P Global Services Purchasing Managers Index (PMI) rising to 54.4 points in June from 52.6 points in March. Meanwhile, the manufacturing sector contracted further with businesses citing weak new orders. The unemployment rate ended the quarter near its 50-year low at 3.6 per cent as tightness in the labour market persisted. Inflation fell to an annual rate of 3.0 per cent in June 2023, significantly below its high of 9.1 per cent in June 2022. However, higher energy costs caused inflation to accelerated to 3.2 per cent in July and 3.7 per cent in August. US core inflation however, excluding food and energy, fell for the fifth month to 4.3 per cent in August.

Economic activity growth in the UK remained largely subdued at 0.2 per cent during the quarter ended June following a 0.10 per cent quarter-on-quarter increase during the

first three months of 2023. Business conditions in the manufacturing sector worsened with the S&P Global/CIPS UK Manufacturing PMI falling to 46.5 points in June from 47.9 points in March. However, an uptick in demand for travel, tourism and leisure provided support to service sector companies. Progress on the inflation front was slower than its peers. Despite falling fuel costs, sustained food price increases kept inflation elevated with the CPI remaining above 10.0 per cent earlier this year before falling to 7.9 per cent in June and 6.8 per cent in July. The unemployment rate rose to 4.0 per cent in May from 3.9 per cent in March. Nonetheless, ongoing labour shortages helped to drive solid wage growth which provided some relief to households contending with rising living expenses.

Similarly, the Eurozone's economy stalled in the three months to June 2023, growing by only 0.1 per cent over the quarter. Germany, the bloc's largest economy, registered zero (quarter-on-quarter) growth while France and Italy grew by 0.5 per cent and -0.4 per cent, respectively. Economic indicators revealed activity remained anaemic with the cumulative impact of higher interest rates and rising pricing pressures leading to weaker global and domestic demand. The manufacturing sector continued to struggle with business surveys highlighting weak foreign demand and higher financing costs. The S&P Global Euro Area Composite PMI declined to 49.9 points in June from 53.7 points in March. On the inflation front, price increases remained elevated at 5.5 per cent in June and 5.3 per cent in July, a substantial improvement from its peak of 10.6 per cent in October 2022.

In Asia, Japan's economic growth accelerated to an annualised rate of 3.1 per cent during the second quarter of 2023, from 2.7 per cent in the first quarter. The expansion was driven by strong business investment as companies sought to restore inventories with the supply disruptions related to the pandemic and Russia-Ukraine war largely resolved. This positive momentum continued into the three months to June 2023, albeit at a more modest pace. Slowing export orders due in part to China's weaker than anticipated post-pandemic recovery hampered the manufacturing sector while, the service industry continued to benefit from robust demand driven by the return of foreign tourists following the removal of COVID-19 border controls. Inflation receded to 3.3 per cent in June from its peak of 4.3 per cent earlier this year. Meanwhile, employee earnings grew by 2.9 per cent in May alongside the government's efforts to promote wage growth in hopes of encouraging domestic demand.

Most major central banks continued to tighten monetary policy amid slowing but still above target inflation. The Fed raised its key policy rate in May by 25 basis points to a range of 5.0 per cent to 5.25 per cent. However, following 10 consecutive rate hikes, the Federal Open Market Committee decided to leave rates unchanged in June but indicated that two additional rate increases were anticipated by the end of 2023. The ECB lifted interest rates by 25 basis points twice over the quarter bringing its marginal lending rate to 4.25 per cent. Meanwhile, the BoE raised its bank rate by 25 basis points in May and returned to a larger 50 basis points hike in June. This brought the bank rate to 5.0 per cent and marked its 13th consecutive increase. The BoJ maintained its accommodative position and kept its short-term interest rate at -0.10 per cent and its 10-year bond yield target at 0.0 per cent.

SECTION 2 – CAPITAL AND MONEY MARKET REVIEW

Financial market volatility eased during the quarter as uncertainties emanating from the banking crisis and a potential US debt default diminished. Resilient economic data and further evidence of slowing inflation in most regions also helped to improve the global growth outlook and dampen recession risks. In the US, market volatility as measured by the Chicago Board Options Exchange Volatility Index (VIX) averaged 16.47 points for the quarter ending June 2023, down from 20.70 points during the previous three-month period. Similarly, the European measure of investor anxiety, the Euro Stoxx 50 Volatility Index (VSTOXX) declined by 3.10 points to a quarterly average of 17.07 points.

US equity markets delivered positive returns with most of the gains occurring in June. Risk sentiment was initially hampered by lingering concerns around the banking sector and stalled debt ceiling negotiations in Washington. However, optimism that the Fed was nearing the end of its rate hiking cycle, better-than-expected corporate earnings and enthusiasm over artificial intelligence (AI) related profit growth drove stocks higher towards the end of the quarter. The US Standard and Poor's (S&P) 500 index rose by 8.74 per cent driven by the rally in large capitalisation technology companies. Consumer discretionary stocks also performed well while the utilities and energy sector modestly detracted. Oil prices declined as weaker demand prospects amid disappointing Chinese economic growth outweighed OPEC Plus production cuts. West Texas Intermediate Crude Oil (WTI) fell to US\$70.64 per barrel at the end of June from US\$75.67 per barrel as at March 31, 2023.

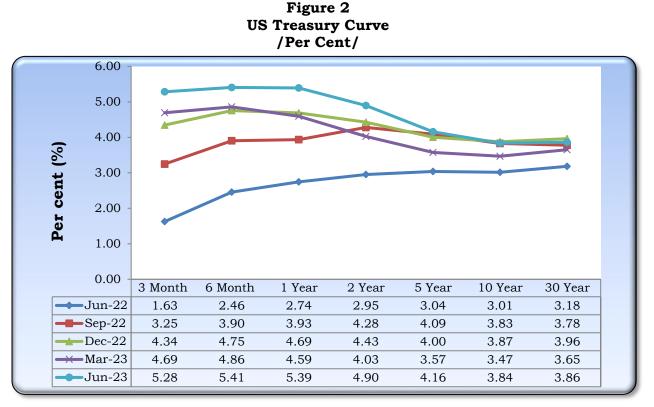
Meanwhile, non-US developed stock markets, as represented by the MSCI EAFE index, earned 3.14 per cent, when measured in US dollars (see Figure 1). In Europe, a significant slowdown in inflation towards the end of the quarter bolstered stock valuations. However, stagnating growth in the Eurozone and China's disappointing post-COVID lockdown recovery curbed overall equity market gains. Germany's DAX index and France's CAC 40 index advanced 3.32 per cent and 3.52 per cent, respectively. In contrast, the UK's FTSE 100 index declined by 0.42 per cent due in part to its relatively higher exposure to commodity companies. The country's persistently high inflation and the BoE's larger than anticipated rate hike in June also added to the downbeat outlook. Meanwhile, in Asia, Japan's Nikkei 225 index returned 18.48 per cent alongside robust foreign fund flows. Surprisingly strong economic growth, the positive impact of a weaker Yen on exports as well as optimism over structural reforms boosted investors' confidence in Japanese stocks.

U.S. Treasury yield movements over the quarter were driven by concerns over the banking crisis, US debt ceiling negotiations and expectations for Fed policy. Early in the period, investors remained cautious following the failure of several US regional banks. However, yields resumed their upward trend with signs of limited contagion effects to the wider financial system and the need for further monetary policy tightening. Heightened volatility around the US debt ceiling debate abated with the passage of the Fiscal Responsibility Act in early June. Overall, the 2-year yield rose by 87 basis points to 4.90 per cent while the 10-year yield added 37 basis points to 3.84 per cent. The inversion between the 2-year to 10-year segment of the curve, a widely monitored recession indicator, has persisted since July 2022 and increased over the quarter to end at a historic high of -106 basis points.

Figure 1 Total Returns on Equity Indices /Per cent/



Source: Bloomberg



Source: Bloomberg

The broader US fixed income market, as represented by the Bloomberg Barclays US Aggregate Bond Index, fell 0.84 per cent for the quarter ending June 2023 (see Figure 3). The rising interest rate environment contributed to the negative performance while higher coupon income and narrower investment grade credit spreads helped to partially offset losses. When combined, this resulted in relatively better returns in the Asset Backed Securities and US Corporate bond sectors. Within US Corporates, financial institutions delivered positive total returns as headwinds from the banking crisis receded over the quarter.

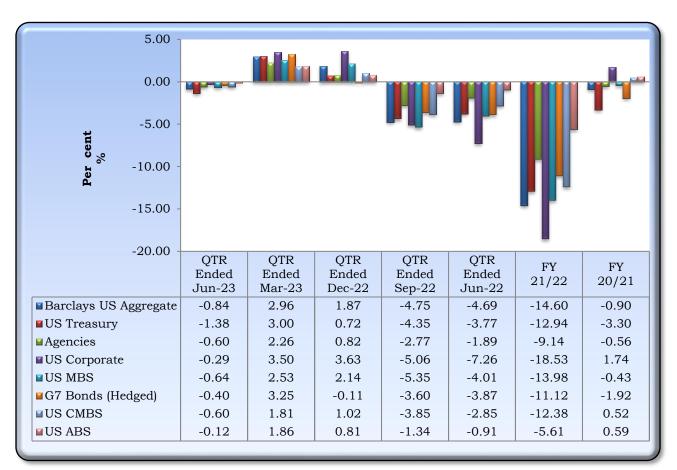
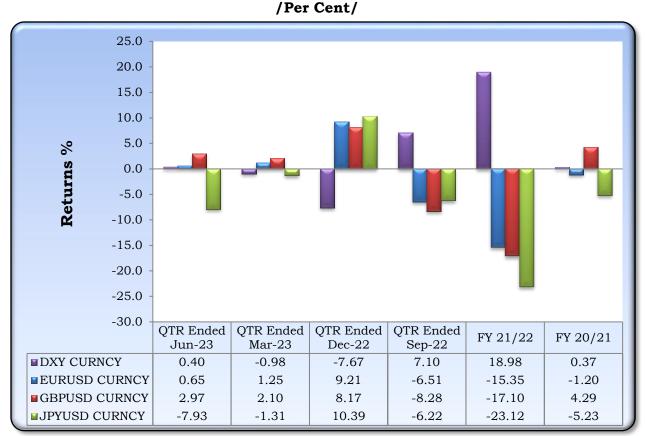


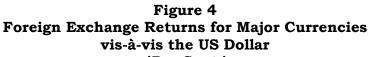
Figure 3 Returns on Fixed Income Indices /Per Cent/

Source: Bloomberg

The US dollar appreciated with the US dollar spot index (DXY) increasing by 0.40 per cent. The Japanese Yen depreciated by 7.93 per cent against the US dollar reflecting

expectations for the BoJ to maintain its ultra-accommodative stance. In contrast to the Fed's policy pause in June, the BoE's larger rate increase helped strengthen the British Pound which appreciated 2.97 per cent for the quarter. Meanwhile, the Euro rose by 0.65 per cent against the US dollar as ECB officials indicated additional interest rate hikes would be necessary later this year given their inflation outlook.





Source: Bloomberg

SECTION 3 – PORTFOLIO PERFORMANCE

Strategic Asset Allocation

Table 3 reports the actual mandate weights of the HSF's Investment Portfolio relative to its approved SAA for the quarter ended June 2023 and the previous three (3) quarters.

Table 3Portfolio Composition relative to the Approved SAA2/per cent/

			Sep-22	Dec-22	Mar 23	Jun 23
ts	Asset Class	Target Weight SAA	Actual % of Fund	Actual % of Fund	Actual % of Fund	Actual % of Fund
Weights	US Short Duration Fixed Income	25.00	23.54	21.77	21.15	20.47
Portfolio V	US Core Domestic Fixed Income	40.00	33.62	31.38	30.83	29.88
Portj	US Core Domestic Equity	17.50	21.94	21.48	22.10	23.41
	Non-US Core International Equity	17.50	17.44	18.62	19.40	19.81
	USD Fixed Deposit	0.00	3.46	6.75	6.52	6.43

Totals may not sum to 100 due to rounding.

During the three months ended June 2023, fluctuations in the market values of the HSF's assets resulted in changes in the mandate weights. At the end of the quarter, the Fund maintained an overall underweight allocation to fixed income securities and a corresponding overweight to equities and USD fixed deposits. When compared to the SAA, the US Core Domestic Fixed Income mandate held the largest underweight position of 10.12 per cent while the USD fixed deposit portfolio had the highest overweight exposure at 6.43 per cent (see Table 3). With the Fund's asset allocation deviations above the approved +/-5.0 per cent limit, the Board continues to evaluate market conditions and reassess its capital market expectations to determine the appropriate asset mix.

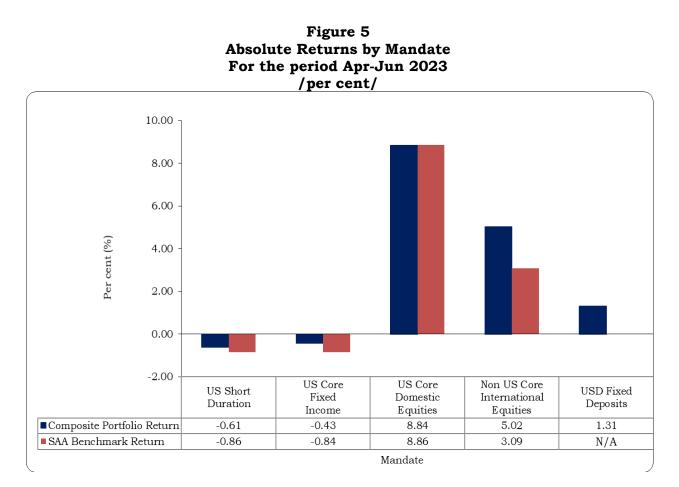
The total net asset value of the Fund as at the end of June 2023 was **US\$5,525.0 million**, compared to US\$5,380.1 million as at March 31, 2023. Of this total, the Investment Portfolio was valued at US\$5,524.5 million, while the remaining portfolio

 $^{^2}$ The Board's approved investment policy allow the mandate weights to deviate from the approved SAA weights by +/- 5 per cent.

was held in operating cash accounts to meet the day-to-day expenses that arise from the management of the Fund.

Performance of the Investment Portfolio

During the third fiscal quarter of 2023, the HSF's Investment Portfolio returned 2.75 per cent with positive contributions from the equity mandates and USD fixed deposit portfolio (see Figure 5).



When compared with its SAA benchmark³, which increased by 1.53 per cent, the HSF delivered 1.22 per cent in excess returns. The Fund's relative asset weights and external managers' strategies contributed to this outperformance. In aggregate, all mandates,

³ The SAA benchmark is a blended benchmark, which comprises of the ICE Bank of America US Treasury 1-5 Year Index (25%), Bloomberg Barclays US Aggregate Bond Index (40%), Russell 3000 ex Energy Index (17.5%), and MSCI EAFE ex Energy Index (17.5%).

with the exception of the US Core Domestic Equity mandate, delivered returns above their respective market benchmarks.

The **US Core Domestic Equity** mandate rose by 8.84 per cent over the quarter ended June 2023. This compares to a return of 8.86 per cent for its benchmark, the Russell 3000 ex-Energy index (see Figure 5). Stock selection in the consumer discretionary and industrials sectors added value while, relative positioning in consumer staples and financials hindered performance. During the quarter, the mandate's net asset value increased by \$104.7 million to **US\$1,293.4 million** as at the end of June 2023.

The **Non-US Core International Equity** mandate gained 5.02 per cent over the quarter and outperformed its benchmark, the MSCI EAFE ex-Energy index by 193 basis points. Both country allocation and security selection contributed to outperformance. An overweight to Japan was positive for returns and was further augmented by stock decisions within the country. Elsewhere, equity decisions in Germany and Sweden also enhanced performance. The net asset value of the mandate ended June 2023 at **US\$1,094.5 million**, up from US\$1,043.4 million as at March 31, 2023.

The **US Short Duration Fixed Income** mandate lost 0.61 per cent over the quarter while its benchmark, the ICE Bank of America US Treasury 1-5 year index, fell by 0.86 per cent. Interest rate strategies were net positive for performance and exposure to high quality credit spread products incrementally added to returns. The net asset value of the mandate as at June 30, 2023 was **US\$1,130.7 million** compared to US\$1,137.9 million as at the end of the prior quarter.

The longer duration **US Core Domestic Fixed Income** mandate returned -0.43 per cent while the benchmark, the Bloomberg Barclays US Aggregate Bond index, lost 0.84 per cent. Key interest rate positioning along the yield curve and the portfolio's lower duration exposure were the main drivers of outperformance. Security selection within the investment grade corporate sector was also positive while overweight exposures to the securitised sector detracted from overall gains. The net asset value of the mandate as at the end of the quarter was **US\$1,650.8 million**, down from US\$1,658.6 million three months earlier.

The **USD Fixed Deposit** portfolio earned 1.31 per cent over the quarter. The value of the portfolio as at the end of June 2023 was **US\$355.2 million** compared to US\$350.6 million on March 31, 2023.

SECTION 4 – COMPLIANCE AND PORTFOLIO RISKS

Compliance

Following extreme market events that transpired at the beginning of the pandemic in March 2020, one manager in the US Core Domestic Fixed Income mandate operated above the risk target relative to the benchmark, as stated in the investment guidelines. The Central Bank, as manager of the Fund, aims to bring the portfolio back in compliance with the investment guidelines as soon as feasible. In the interim, the Central Bank closely monitors the manager and holds frequent discussions regarding the market environment and portfolio positioning.

During the quarter, the relative deviation of the mandate weights from the approved SAA were maintained and reflected market value movements. As at June 30, 2023, asset classes varied above the allowable +/- 5 per cent deviation (see Table 3). In July, taking into consideration the uncertain short-term market outlook, the HSF Board decided to maintain its allocation to USD Fixed Deposits for an additional six-week period. The Central Bank will continue to monitor the fund's asset class exposures and provide monthly updates to the Board.

Portfolio Risks

The main risks for the HSF portfolio are credit, concentration, interest rate, and currency risks. The following paragraphs give a description of how these risks are mitigated.

Credit Risk

Within the **money market portion** of the Fund, credit risk is minimised by the strict adherence to the following standards: (i) all counterparties must have a minimum credit rating of either A-1 from the Standard and Poor's rating agency or P-1 from Moody's

Investors Services; and (ii) a maximum exposure limit for counterparties of no more than 5.0 per cent of the market value of the portfolio.

For **fixed income instruments**, credit risk is mitigated by the use of credit concentration limits as well as minimum credit quality ratings. Bonds must have an investment grade rating as defined by Standard and Poor's, Moody's Investors Services or Fitch Ratings Incorporated. Should the required ratings on an existing fixed income security fall below the minimum standards, the security must be sold within an agreed upon timeframe. Table 4 below shows the average credit quality of the US Short Duration and US Core Fixed Income Portfolios as at June 30, 2023.

Mandate	Portfolio	Benchmark
US Short Duration	AA+	AA+
US Core Fixed Income	AA-	AA

Table 4 Average Credit Rating

Concentration Risk

Concentration or diversification risk is minimised by investing across various asset types and holding a large number of positions within an asset class. The aim is to minimise risk and/or maximise return by investing in a wide cross-section of asset classes and positions that would each react differently to the same market event. As such, it is likely that when one has strong returns, another may have lower returns to the same market event.

The portfolio is currently invested across five (5) asset groups as follows: US Short Duration Fixed Income; US Core Domestic Fixed Income; US Core Domestic Equity and Non-US Core International Equity and USD Fixed Deposits. Concentration risk is also minimised within asset groups by approved market exposure and issuer holding limits.

For the **equity portfolios**, this risk is managed by imposing a maximum percentage holding of 3.0 per cent of any security's outstanding shares, as well as a maximum sector deviation relative to the benchmark of 5.0 per cent.

Interest Rate Risk

Interest rate risk is managed using a weighted average effective duration limit on the respective portfolios. For the US Short Duration Fixed Income mandate, the allowable range is six months longer or shorter than the weighted average duration of its respective benchmark. While the US Core Domestic Fixed Income mandate has an allowable range of 12 months longer or shorter than the weighted average duration of its respective benchmark. Table 5 shows the weighted average duration for the US Short Duration and US Core Domestic Fixed Income portfolios as at June 30, 2023.

	Table 5	
Weighted	Average	Duration
	/Years/	

Mandate	Portfolio	Benchmark
US Short Duration	2.37	2.57
US Core Domestic Fixed Income	6.13	6.31

Currency Risk

Currency risk is managed by containing and managing the exposure to non-US dollar instruments. For the fixed income mandates, no more than 10 per cent of the market value of the portfolio can be invested in securities denominated in currencies other than the US Dollar. For these mandates, non-US dollar currency exposure is fully hedged into the US Dollar. However, the effectiveness of the hedge may vary depending on market conditions.

For the US Core Domestic Equity mandate, no more than 5 per cent of the market value of the portfolio can be invested in securities denominated in currencies other than the US Dollar. The performance benchmark for the Non-US Core International Equity portfolio is the custom MSCI EAFE ex-energy Index. The index comprises of equity securities of issuers domiciled in developed markets countries, excluding the US and Canada. Where benchmark securities are quoted in currencies other than the US dollar, the Fund accepts the currency risk. For this mandate, however, managers can hedge up to 15 per cent of the market value of their currency exposure into the US dollar, the base reporting currency for the HSF. At the end of June 2023, the currency exposure for this portfolio was 98 per cent of its market value. During the quarter, all the portfolios were within their respective limits.

Appendix I

HSF Portfolio - Historical Performance

	C	urrent Returns	5		Financial YTD		Annualised Return Since Inception		
Quarter End	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess
	%	%	bps	%	%	bps	%	%	bps
	FY 2	010							
December	0.96	0.89	6.65	0.96	0.89	6.65	3.72	3.78	-6.16
March	1.61	1.68	-6.20	2.59	2.58	0.49	3.95	4.03	-7.76
June	-1.83	-1.89	6.05	0.71	0.64	6.69	3.07	3.12	-5.18
September	5.33	5.08	24.73	6.07	5.75	31.93	4.37	4.35	2.06
	FY 2	011							
December	2.29	2.21	8.15	2.29	2.21	8.15	4.70	4.65	4.13
March	1.62	1.54	7.24	3.94	3.79	15.68	4.81	4.76	5.72
June	1.88	1.81	6.68	5.89	5.67	22.91	4.98	4.91	7.00
September	-4.82	-4.28	-53.66	0.79	1.14	-34.89	3.57	3.63	-6.29
	FY 2	012							
December	2.74	3.03	-28.52	2.74	3.03	-28.52	3.97	4.08	-12.00
March	5.04	4.46	57.50	7.92	7.63	29.29	4.78	4.78	-0.08
June	-0.90	-0.60	-30.42	6.95	6.98	-3.72	4.37	4.43	-6.13
September	3.53	2.98	55.03	10.73	10.18	55.02	4.68	4.65	2.07
	FY 2	013							
December	1.49	1.45	4.11	1.49	1.45	4.11	4.88	4.83	4.76
March	3.29	2.90	39.19	4.82	4.38	44.01	5.23	5.12	11.20
June	-0.30	-0.69	39.05	4.51	3.66	84.64	4.97	4.80	17.26
September	3.95	3.47	47.35	8.63	7.26	137.06	5.40	5.16	24.01
	FY 2	014							
December	3.95	2.66	129.38	3.95	2.66	129.38	5.80	5.37	42.67
March	1.46	1.30	16.28	5.47	4.00	147.73	5.80	5.37	43.52
June	2.56	2.30	25.90	8.17	6.38	178.44	5.96	5.51	45.76
September	-0.48	-0.73	25.31	7.65	5.60	204.51	5.69	5.22	47.69
FY 2015									
December	2.25	1.63	62.27	2.25	1.63	62.27	5.81	5.26	54.46
March	2.29	2.25	3.95	4.60	3.92	67.71	5.92	5.39	53.34
June	-0.02	-0.51	49.43	4.58	3.39	119.07	5.74	5.16	57.93
September	-2.02	-2.19	16.83	2.47	1.13	134.06	5.31	4.73	58.12

		Current Return	ns		Financial YTD			Annualised Return Since Inception		
Quarter End	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess	
-	%	%	bps	%	%	bps	%	%	bps	
	FY 2	2016								
December	1.68	1.67	0.22	1.68	1.67	0.22	5.36	4.79	56.52	
March	0.80	1.26	-46.14	2.48	2.95	-46.70	5.30	4.80	49.64	
June	0.80	1.11	-30.92	3.30	4.09	-78.90	5.24	4.79	44.83	
September	2.45	2.12	32.85	5.83	6.29	-45.72	5.37	4.89	47.33	
	FY 2	2017								
December	-0.46	-0.98	51.92	-0.46	-0.98	51.92	5.17	4.66	51.64	
March	3.17	2.92	24.41	2.69	1.91	77.74	5.37	4.84	52.92	
June	2.74	2.44	30.00	5.50	4.40	110.45	5.51	4.97	54.69	
September	2.61	2.06	54.78	8.25	6.55	170.48	5.64	5.05	58.79	
	FY 2	2018								
December	2.24	1.83	40.22	2.24	1.83	40.22	5.72	5.11	61.32	
March	-0.55	-0.94	38.21	1.67	0.88	78.91	5.53	4.90	63.49	
June	0.26	0.21	5.36	1.94	1.09	84.52	5.43	4.81	62.52	
September	1.81	1.54	27.02	3.79	2.65	113.37	5.47	4.84	63.61	
	FY 2	2019								
December	-4.69	-3.54	-114.99	-4.69	-3.54	-114.99	4.93	4.41	51.33	
March	5.93	5.61	31.25	0.96	1.88	-91.66	5.33	4.79	53.03	
June	3.01	3.26	-25.10	4.00	5.20	-119.99	5.47	4.97	49.95	
September	1.05	1.27	-21.70	5.10	6.54	-144.08	5.44	4.97	47.15	
	FY 2	2020								
December	3.62	3.20	41.90	3.62	3.20	41.90	5.63	5.13	49.64	
March	-7.33	-5.51	-182.43	-3.98	-2.48	-149.43	4.90	4.58	32.73	
June	8.62	7.57	104.53	4.30	4.90	-60.38	5.46	5.06	39.94	
September	3.74	2.98	76.36	8.20	8.03	17.42	5.65	5.20	45.01	

	Current Returns				Financial YTD		Annualised Return Since Inception		
Quarter End	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess	Portfolio	Benchmark	Excess
	%	%	bps	%	%	bps	%	%	bps
	FY 20	021							
December	6.43	5.50	93.52	6.43	5.50	93.52	6.02	5.51	51.10
March	1.28	0.08	119.45	7.79	5.58	220.73	6.00	5.41	59.10
June	4.00	3.09	90.18	12.10	8.85	324.76	6.19	5.54	64.60
September	-0.31	-0.09	-22.00	11.75	8.75	299.80	6.05	5.44	61.82
	FY 2	022							
December	2.97	1.98	99.31	2.97	1.98	99.31	6.16	5.48	67.75
March	-5.69	-5.44	-25.12	-2.89	-3.57	68.04	5.64	5.00	64.44
June	-9.91	-7.81	-209.37	-12.51	-11.10	-140.61	4.83	4.36	47.24
September	-4.59	-4.93	34.58	-16.52	-15.49	-103.41	4.43	3.95	48.73
	FY 2023								
December	5.27	5.13	14.43	5.27	5.13	14.43	4.70	4.21	48.99
March	4.74	4.57	16.93	10.27	9.94	32.92	4.93	4.44	49.39
June	2.75	1.53	121.88	13.30	11.62	167.81	5.03	4.46	56.33

Notes:

(1) Differences in totals are due to rounding.

(2) In August 2009, International Equities and Fixed Income Securities were added to the HSF portfolio. The performance benchmark for the HSF portfolio became a blended benchmark which comprise, Bank of America/Merrill Lynch US Treasury 1-5 Years Index, US One-month LIBID Index, Barclays US Aggregate, Russell 3000 ex Energy, and MSCI EAFE ex Energy.

(3) In January 2011, the HSF Portfolio achieved its Strategic Asset Allocation where the portfolio was invested in four assets classes. US Short Duration Fixed Income (25), US Core Fixed Income (40), US Equity (17.5) and Non-US International Equity (17.5).

(4) With effect from the quarter ended December 2012, the Annualised Returns Since Inception were computed using a geometric average and not the previously used arithmetic average. For comparative purposes, prior period annualized returns since inception shown above were computing using a geometric average.

Appendix II Heritage and Stabilisation Fund Portfolio Valuation (USD)

Valuation Date	Net Asset Value	Total Comprehensive Income	Accumulated Surplus & Unrealized Capital Gains/Losses	Contributions / (Withdrawals)
Annual Portfolio V	aluation			
September 30,2007	1,766,200,701	41,966,361	41,966,361	321,706,043
September 30,2008	2,888,421,556	68,412,770	110,379,131	1,054,174,457
September 30,2009	2,964,686,478	76,248,691	186,755,766	-
September 30,2010	3,621,984,041	177,645,460	364,361,226	477,344,263
September 30,2011	4,084,016,158	9,715,841	374,074,067	451,400,519
September 30,2012	4,712,376,278	420,693,705	794,770,772	207,550,846
September 30,2013	5,154,027,747	399,007,950	1,193,778,722	42,414,251
September 30,2014	5,533,425,248	379,167,024	1,572,945,746	-
September 30,2015	5,655,143,565	120,639,605	1,693,585,351	-
September 30,2016	5,584,246,290	305,452,096	1,999,037,447	(375,050,860)
September 30, 2017	5,762,544,777	429,475,446	2,428,512,893	(252,548,048)
September 30, 2018	5,965,847,092	203,717,910	2,632,230,803	-
September 30, 2019	6,255,349,599	288,837,111	2,921,067,914	-
September 30, 2020	5,731,799,397	457,090,777	3,378,158,691	(979,853,158)
September 30, 2021	5,463,893,835	624,178,449	4,002,337,140	(892,714,533)
September 30, 2022	4,712,444,758	(913,456,918)	3,088,880,222	163,994,499

Quarterly Portfolio Valuation

December 31, 2014	5,653,895,156	120,509,077	1,693,454,823	-
March 31, 2015	5,779,420,631	125,471,133	1,818,925,956	-
June 30, 2015	5,774,951,169	(4,765,278)	1,814,160,678	-
September 30, 2015	5,655,143,565	(120,575,327)	1,693,585,351	-
December 31, 2015	5,744,963,957	90,833,573	1,784,418,924	-
March 31, 2016	5,787,343,363	42,134,260	1,826,553,184	-
June 30, 2016	5,454,568,405	42,838,704	1,869,391,888	(375,050,860)
September 30, 2016	5,584,246,290	129,645,559	1,999,037,447	-
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Appendix II Heritage and Stabilisation Fund Portfolio Valuation (USD)

Valuation Date	Net Asset Value	Total Comprehensive Income	Accumulated Surplus & Unrealized Capital Gains/Losses	Contributions / (Withdrawals)
Quarterly Portfolic	Valuation			
December 31, 2016	5,555,039,859	(29,605,256)	1,969,432,191	_
March 31, 2017	5,473,047,983	170,609,885	2,140,042,076	(252,548,048)
June 30, 2017	5,619,311,033	146,006,897	2,286,048,973	-
September 30, 2017	5,762,544,777	142,463,920	2,428,512,893	-
December 31, 2017	5,888,599,170	124,900,387	2,553,413,280	-
March 31, 2018	5,852,789,288	(36,468,342)	2,516,944,938	-
June 30, 2018	5,863,070,206	12,336,541	2,529,281,479	-
September 30,2018	5,965,847,092	102,949,324	2,632,230,803	-
December 31,2018	5,683,219,683	(486,810,763)	2,349,137,950	-
March 31, 2019	6,016,429,263	333,123,750	2,682,261,700	-
June 30, 2019	6,194,328,757	177,424,921	2,859,686,621	-
September 30, 2019	6,255,349,599	61,381,293	2,921,067,914	-
December 31, 2019	6,478,340,872	222,180,512	3,143,248,426	-
March 31, 2020	5,925,283,653	(473,394,404)	2,669,854,022	(79,853,158)
June 30, 2020	5,817,072,795	493,393,358	3,163,247,380	(600,000,000)
September 30, 2020	5,731,799,397	214,911,311	3,378,158,691	(300,000,000)
December 31, 2020	5,888,114,410	355,398,920	3,733,557,611	(198,943,283)
March 31, 2021	5,661,689,420	67,788,202	3,801,345,814	(293,771,250)
June 30, 2021	5,583,193,276	220,867,117	4,022,212,931	(300,000,000)
September 30, 2021	5,463,893,835	(19,875,791)	4,002,337,140	(100,000,000)
December 31, 2021	5,623,159,544	158,986,912	4,161,324,052	-
March 31, 2022	5,299,527,705	(323,446,707)	3,837,877,345	-
June 30, 2022	4,771,488,412	(527,955,978)	3,309,921,367	-
September 30, 2022	4,712,444,758	(221,041,145)	3,088,880,222	163,994,499
December 31, 2022	5,139,740,767	245,008,297	3,333,888,519	182,213,278
March 31, 2023	5,380,057,262	240,193,741	3,574,082,260	-
June 30, 2023	5,525,021,764	144,766,607	3,718,848,867	

Appendix III

Summary Characteristics of Composite Benchmarks

Key Characteristics	Bloomberg Barclays US Aggregate Index	Merrill Lynch 1-5 Index	
Total Holdings	13,362	157	
Coupon (%)	2.88	2.04	
Duration (Years)	6.31	2.57	
Average Life (Years)	8.60	2.74	
Yield to Maturity (%)	4.81	4.71	
Option Adjusted Spread (bps)	49	0.00	
Average Rating (S&P)	AA	AA+	
Minimum Rating (S&P)	BBB	AA+	

Fixed Income Benchmarks

Equity Benchmarks

Key Characteristics	Russell 3000 (ex-Energy)	MSCI EAFE (ex-Energy)	
Total Holdings	2,854	771	
Earnings Per Share (EPS Growth 3-5yr fwd.)	13.2	8.90	
Price Earnings (P/E fwd.)	20.6	14.35	
Price / Book (P/B)	3.8	1.78	
Weighted Average Market Capitalisation* (Bn)	604.8	89.6	

*Market capitalisation is a measurement of the size of a company (share price x the number of outstanding shares). The weighted average market capitalisation of a stock market index represents the average size of the firms comprising the index where each is weighted according to its market capitalisation.

Appendix IV

Summary of the Fund's Net Asset Value by Mandate

/US\$ Million/

	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23
Total Fund Value	4,771.5	4,712.4	5,139.7	5,380.1	5,525.0
Total Value of Equity	2,227	1,855	2,060	2,232	2,388
US Core Domestic Equity	1,148	1,034	1,104	1,189	1,293
Non-US Core International Equity	1,079	821	957	1,043	1,094
Total Value of Fixed Income	2,542	2,693	2,731	2,796	2,781
US Short Duration Fixed Income	980	1,109	1,119	1,138	1,131
US Core Domestic Fixed Income	1,562	1,584	1,612	1,659	1,651
Internal Portfolio		163	347	351	355
Total Value of Operating Cash	2	1	1	0.9	0.5

NB: Differences in totals are due to rounding.

Appendix V

HSF Portfolio and SAA Benchmark Quarterly Returns



